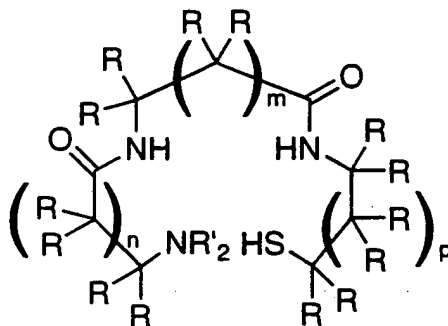


PROPOSED AMENDED CLAIMS

2. (currently amended) A reagent comprising a targeting moiety covalently linked via a bivalent linking group to a metal chelator ~~having a~~ in which the metal chelator and the bivalent linking together have the formula:



wherein:

n , m and p are each independently 0 or 1,

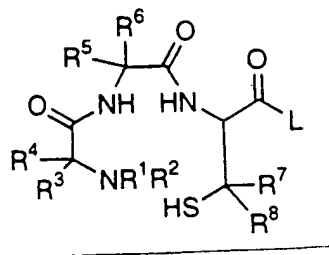
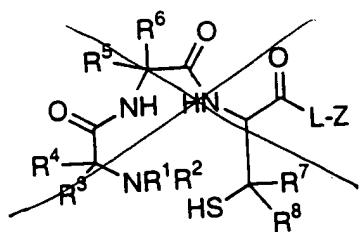
each R' is independently H, lower alkyl, hydroxyalkyl ($\text{C}_2\text{-C}_4$), or alkoxyalkyl ($\text{C}_2\text{-C}_4$);

each R is independently H or R'' , where R'' is substituted or unsubstituted lower alkyl or phenyl not comprising a thiol group;

one R or R' is L, wherein when an R' is L, $\text{-NR}'_2$ is an amine; and

L is a the bivalent linking group ~~linking the chelator to the targeting moiety~~.

3. (currently amended) A reagent according to claim 2, wherein the metal chelator ~~has a~~ and the bivalent linking group together have the formula:



wherein:

R^1 and R^2 are each independently H, lower alkyl, hydroxyalkyl C_2-C_4) or alkoxyalkyl (C_2-C_4);

R^3 , R^4 , R^5 and R^6 are independently H, substituted or unsubstituted lower alkyl or phenyl not comprising a thiol group; and

R^7 and R^8 are each independently H, lower alkyl, lower hydroxyalkyl or lower ~~alkoxyalkyl~~; alkoxyalkyl.

~~L is a bivalent linking moiety; and~~

~~Z is a targeting moiety.~~

7. (currently amended) A reagent according to claim 2, wherein the metal chelator is selected from the group consisting of:

(amino acid)¹-(amino acid)²-cysteine-,

(amino acid)¹-(amino acid)²-isocysteine-,
(amino acid)¹-(amino acid)²-homocysteine-,
(amino acid)¹-(amino acid)²-penicillamine-,
(amino acid)¹-(amino acid)²-2-mercaptoethylamine-,
(amino acid)¹-(amino acid)²-2-mercaptopropylamine-,
(amino acid)¹-(amino acid)²-2-mercapto 2-methylpropylamine-,
(amino acid)¹-(amino acid)²-3-mercaptopropylamine-,

wherein:

(amino acid) is a primary α - or β -amino acid not comprising a thiol, and
~~wherein the chelator is attached to a targeting moiety via a covalent bond with a carboxyl~~
~~terminus of the chelator or via a side chain on one (amino acid).~~

10. (currently amended) A reagent according to claim 2 3, wherein the
~~chelating group~~ metal chelator has a formula selected from the group consisting of:

Gly-Gly-Cys- and

Arg-Gly-Cys-

~~(ϵ -Lys)-Gly-Cys~~

~~(δ -Orn)-Gly-Cys~~

~~(γ -Dab)-Gly-Cys~~

and

~~(β -Dap)-Gly-Cys~~